

Amendments to the Claims

Please cancel Claims 49-53, 55-56, 71-72, and 74-76. Please amend Claims 54, 57, 58, 60, 62, 63, 67, 70, 73, 77, 78, 80-83, 87 and 90. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-53. (Canceled)

54. (Currently amended) A method of decontaminating a gas, comprising removing water contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising ~~The method of Claim 53, wherein the decontaminant~~ comprises about 70% by volume of an electropositive metal component, about 15% by volume of a late transition metal component and about 15% of a high silica zeolite component.

55-56. (Canceled)

57. (Currently amended) A method of decontaminating a gas, comprising removing sulfur oxide contaminants, nitrogen oxide contaminants or both, from the gas by passing the gas through a body of decontaminant, the decontaminant comprising ~~The method of Claim 56, wherein the decontaminant comprises~~ about 30% by volume of an electropositive metal component, about 50% by volume of a late transition metal component and about 20% by volume of a high silica zeolite component.

58. (Currently amended) A method of decontaminating a gas, comprising removing one or more of neutral polar protic, neutral polar aprotic, alkaline and polar acidic contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of an electropositive metal component, 10% to 80%

by volume of a late transition metal compound component and 10% to 80% by volume of a high silica zeolite component, The method of Claim 49, wherein the electropositive metal component comprises a Group 3 metal, a Group 4 metal ~~metals~~, a lanthanide metal, titania, zirconia, yttria or vanadia.

59. (Previously presented) The method of Claim 58, wherein the electropositive metal component is a high surface area titania.
60. (Currently amended) A method of decontaminating a gas, comprising removing one or more of neutral polar protic, neutral polar aprotic, alkaline and polar acidic contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of an electropositive metal component, 10% to 80% by volume of a late transition metal compound component and 10% to 80% by volume of a high silica zeolite component, The method of Claim 49, wherein the high silica zeolite component has a silica to alumina ratio of at least 90 to 1.
61. (Previously presented) The method of Claim 60, wherein the high silica zeolite component has a silica to alumina ratio of at least 400 to 1.
62. (Currently amended) A method of decontaminating a gas, comprising removing one or more of neutral polar protic, neutral polar aprotic, alkaline and polar acidic contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of an electropositive metal component, 10% to 80% by volume of a late transition metal compound component and 10% to 80% by volume of a high silica zeolite component, The method of Claim 49, wherein the high silica zeolite component is Zeolite Y or Zeolite ZSM-5.
63. (Currently amended) A method of decontaminating a gas, comprising removing one or more of neutral polar protic, neutral polar aprotic, alkaline and polar acidic contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant

comprising 10% to 80% by volume of an electropositive metal component, 10% to 80% by volume of a late transition metal compound component and 10% to 80% by volume of a high silica zeolite component. ~~The method of Claim 49,~~ wherein the late transition metal compound component is a late transition metal oxide.

64. (Previously presented) The method of Claim 63, wherein the late transition metal oxide is a Group 7 to 14 metal oxide.
65. (Previously presented) The method of Claim 64, wherein the late transition metal oxide is a Group 10 to 14 metal oxide.
66. (Previously presented) The method of Claim 64, wherein the late transition metal oxide is iron oxide, copper oxide, nickel oxide or zinc oxide.
67. (Currently amended) A method of decontaminating a gas, comprising removing one or more of neutral polar protic, neutral polar aprotic, alkaline and polar acidic contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of an electropositive metal component, 10% to 80% by volume of a late transition metal compound component and 10% to 80% by volume of a high silica zeolite component. ~~The method of Claim 49,~~ wherein the late transition metal component is a reduced late transition metal support on a high surface area inorganic material.
68. (Previously presented) The method of Claim 67, wherein the high surface area inorganic material has a surface area of at least 100 m² per gram.
69. (Previously presented) The method of Claim 67, wherein the high surface area inorganic material is silicon dioxide, aluminum oxide, titanium dioxide or magnesium oxide.
70. (Currently amended) A method of decontaminating a gas, comprising:

removing one or more of neutral polar protic, neutral polar aprotic, alkaline and polar acidic contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of an electropositive metal component, 10% to 80% by volume of a late transition metal compound component and 10% to 80% by volume of a high silica zeolite component; and The method of Claim 49 further comprising

purifying an isolated environment with the gas after removing the contaminants from the gas.

71-72. (Canceled)

73. (Currently amended) A method of decontaminating a gas, comprising removing amine contaminants, acid contaminants or both, from the gas by passing the gas through a body of decontaminant, the decontaminant comprising The method of Claim 72, wherein the decontaminant comprises about 40% by volume of an electropositive metal component, about 20% by volume of a high silica zeolite component and about 40% by volume of a late transition metal component.

74-76. (Canceled)

77. (Currently amended) A method of decontaminating a gas, comprising removing one or more of alkaline, acidic polar, neutral non-polar aprotic and environmental gas contaminant from the gas by passing the gas through a body of decontaminant, the decontaminant comprising The method of Claim 76, wherein the decontaminant comprises about 40% by volume of an electropositive metal component, about 50% by volume of a high silica zeolite component and about 10% by volume of a late transition metal component.

78. (Currently amended) A method of decontaminating a gas, comprising removing one or more of alkaline, acidic polar, neutral non-polar aprotic and environmental gas

contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of a electropositive metal component, 10% to 80% by volume of a high silica zeolite component and 10% to 80% by volume of a late transition metal compound component. ~~The method of Claim 71,~~ wherein the electropositive metal component comprises a Group 3 metal, a Group 4 metal ~~mateh~~, a lanthanide metal, titania, zirconia, yttria or vanadia.

79. (Previously presented) The method of Claim 78, wherein the electropositive metal component is a high surface area titania.
80. (Currently amended) A method of decontaminating a gas, comprising removing one or more of alkaline, acidic polar, neutral non-polar aprotic and environmental gas contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of a electropositive metal component, 10% to 80% by volume of a high silica zeolite component and 10% to 80% by volume of a late transition metal compound component. ~~The method of Claim 71,~~ wherein the high silica zeolite component has a silica to alumina ratio of at least 90 to 1.
81. (Currently amended) The method of Claim 80 ~~71~~, wherein the high silica zeolite component has a silica to alumina ratio of at least 400 to 1.
82. (Currently amended) A method of decontaminating a gas, comprising removing one or more of alkaline, acidic polar, neutral non-polar aprotic and environmental gas contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of a electropositive metal component, 10% to 80% by volume of a high silica zeolite component and 10% to 80% by volume of a late transition metal compound component. ~~The method of Claim 71,~~ wherein the high silica zeolite component is Zeolite Y or Zeolite ZSM-5.

83. (Currently amended) A method of decontaminating a gas, comprising removing one or more of alkaline, acidic polar, neutral non-polar aprotic and environmental gas contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of a electropositive metal component, 10% to 80% by volume of a high silica zeolite component and 10% to 80% by volume of a late transition metal compound component, ~~The method of Claim 71,~~ wherein the late transition metal compound component is a late transition metal oxide.
84. (Previously presented) The method of Claim 83, wherein the late transition metal oxide is a Group 7 to 14 metal oxide.
85. (Previously presented) The method of Claim 84, wherein the late transition metal oxide is a Group 10 to 14 metal oxide.
86. (Previously presented) The method of Claim 84, wherein the late transition metal oxide is iron oxide, copper oxide, nickel oxide or zinc oxide.
87. (Currently amended) A method of decontaminating a gas, comprising removing one or more of alkaline, acidic polar, neutral non-polar aprotic and environmental gas contaminants from the gas by passing the gas through a body of decontaminant, the decontaminant comprising 10% to 80% by volume of a electropositive metal component, 10% to 80% by volume of a high silica zeolite component and 10% to 80% by volume of a late transition metal compound component, ~~The method of Claim 71,~~ wherein the late transition metal component is a reduced late transition metal support on a high surface area inorganic material.
88. (Previously presented) The method of Claim 87, wherein the high surface area inorganic material has a surface area of at least 100 m² per gram.

89. (Previously presented) The method of Claim 87, wherein the high surface area inorganic material is silicon dioxide, aluminum oxide, titanium dioxide or magnesium oxide.
90. (Currently amended) A method of decontaminating a gas, comprising:
removing one or more of alkaline, acidic polar, neutral non-polar aprotic and
environmental gas contaminants from the gas by passing the gas through a body of
decontaminant, the decontaminant comprising 10% to 80% by volume of a
electropositive metal component, 10% to 80% by volume of a high silica zeolite
component and 10% to 80% by volume of a late transition metal compound component;
and ~~The method of Claim 71 further comprising~~
purifying an isolated environment with the gas after removing the contaminants
from the gas.